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Knowledge of Modern Contraceptives among Single Women in Universities in Kwara State, Nigeria

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Abstract

This study examined knowledge of modern contraceptives among single women in universities in Kwara State. Specifically, the study sought to examine differences in knowledge of modern contraceptives based on age, religion and ethnicity among single women in universities in Kwara State, Nigeria. A descriptive research design of a survey type was used. The population for the study comprised all final year single women across four Universities in Kwara State. Multistage sampling technique was used to sample 1996 respondents out of 7429 single women. Descriptive method was used to analyze the demographic data while t-test and Analysis of Variance were used to test the hypotheses set at 5% level of significance. The findings revealed that single women in universities in Kwara State had knowledge of modern contraceptives. Single women less than 19 years had the highest knowledge of modern contraceptives; Muslims had the higher knowledge of modern contraceptives and Hausas had the highest knowledge of modern contraceptives among final year single women in Universities in Kwara State. The study concluded that age, religion and ethnicity caused differences in the knowledge of modern contraceptives among single women in Universities in Kwara State. Therefore, the study recommends that adequate modern contraceptive information and messages be given to single women from 20 years of age, Christian single women and those of Yoruba and Igbo ethnicity.

Keywords: Knowledge, modern contraceptives, single women, religion, ethnicity.

Introduction

According to the National Demographic Health Survey (NDHS) (2013), 24 percent of women aged 15-49 years in Nigeria are currently unmarried. Over 70 percent of these women are between 15 and 39 years of age. This can be attributed to the pursuit of formal education and careers among the female gender. Women now spend sexually active years in schools. The median age at first intercourse among Nigerian women as reported by the NDHS (2013) was 17.6 years. This translates to having a substantial population of single women who are sexually ripe.

Meka, Okwara and Meka (2013) defined contraception as procedures employed to interfere at one stage or the other with the normal sequence of events in the process of reproduction leading to a failure in conception. Methods of contraception as identified by the International Planned Parenthood Federation (IPPF) (2014) include abstinence, contraceptive implant (implanon and nexplanon), contraceptive patch, contraceptive pills, birth control shots (depo-provera, noristerat), contraceptive sponge, contraceptive vaginal ring (nuva ring), breastfeeding as birth control (Lactational Amenorrhea Method, LAM), cervical cap (femcap), male condom, diaphragm, female condom, Fertility Awareness-based Methods (FAMs), Intra Uterine Contraceptive Device (IUCD), morning after pill (emergency contraception for example, postinor 2), outercourse, spermicide, tubal ligation, vasectomy and withdrawal method.

Previous researches have revealed that knowledge about contraceptive methods and fertility, in general, are linked with contraceptive use (Frost, Lindberg & Finer, 2012). Sedgh, Singh and Hussain (2014) also observed that knowledge of modern contraceptives is a strong predictor of use among single women. Over the years, most studies (Mao, 2007; Monjok, Smesny, Ekabua & Essien, 2010; Cleland, Ndugwa & Zulu, 2010; John & Ross, 2010; Allagoa & Nyengidiki, 2011) on contraception focused on married women and only a few studies have focused on single women. This focus is based on the premise and belief that only married women have constant /frequent sex and are the ones in need of proper contraception. However, the importance of providing contraceptive services to single women cannot be over-emphasized. Substantial evidence is found in existing literature that

broadening the choice of contraceptive methods among single women increases overall contraceptive use (Magadi & Curtis, 2003; Chen & Guilkey, 2003). This group of women needs correct and accurate information on contraceptives to be able to make informed choices to avoid unintended pregnancies. Verbal extraction from single women during a family planning outreach programme in Ilorin (2014) revealed that single women believe that modern contraceptives could be used to induce abortion. The reason why any of them even use contraceptives at all is to use it as an abortifacient substance. The purpose of contraception has thus been defeated if pregnancy is established before the use of contraception comes into play.

According to Burgard (2004) and Osakinle, Babatunde and Alade (2013), contraceptive studies in Africa revealed that the continent has demonstrated that a large proportion of young single women who are exposed to the risk of conception, receive poor or no sex and contraceptive education, and they experience a high incidence of unintended childbirth. The end result is that this group of people depends on little bits of information passed to them by their peers. Social media is another source where these single women get information on contraception. These uncensored bits of information often times are inaccurate, misleading and incomplete. These sources of information influence their knowledge and their actual use of contraception in different ways.

The United Nations Population Fund (UNFPA, 2013) postulated that in-depth information about women's knowledge of contraceptive may play a major role in the reduction of unintended pregnancies. Lack of contraceptive knowledge was implicated in the incidence of many unintended pregnancies leading to unsafe abortions. If not well managed, unsafe abortions can lead to complications of the reproductive system and invariably death. UNFPA (2013) further declared that when most young single women are faced with the challenge of unintended pregnancies, obtaining an abortion or child abandonments are usually the options open to them. Cadmus (2010) reported that single women were usually more informed about abortion and its sequelae than about contraception.

Buckley, Barrett and Adkins (2008) stated that reproductive health campaigns should focus on increased information access for all women of reproductive age, broadening the number of information channels available and improving the quality of information available. However, Ibekwe and Obuna (2010) posited that lack of information on sex-related matters, including information on contraceptives accounts for the high prevalence of unintended pregnancies and unsafe abortions in Nigeria. Information sources such as media (radio, television, newspapers, and magazines), informal networks (parents, friends, siblings, relatives, and neighbours), bill boards/posters, health practitioners, and the Internet have been reported as sources consulted for reproductive health knowledge globally and in Nigeria. Bankole and Onasote (2016) explained that parents are a very common source of reproductive health information for young single women, but discussion with parents is likely to be restricted to the moral aspects, such as pressures to resist sex, the time to initiate sex and determining sexual partners. The authors further opined that information passed to children goes a long way in influencing the age of sexual initiation, pregnancy and use of contraceptives, but lack of knowledge, fears that such talk could encourage sexual initiation and promiscuity, and the inability to initiate and maintain a conversation on such topics make most parents to avoid such discussions (Bankole & Onasote, 2016).

The Nigeria Demographic and Health Survey (NDHS) (2013) opine that the knowledge of contraceptive and its use are the key variables in any study on fertility regulation and in the evaluation of family planning programmes. Acquiring knowledge about fertility control is an important step towards gaining access to and using a suitable contraceptive method in a timely and effective manner. It is worthy of note that a certain level of awareness usually precedes the use of a particular contraceptive method. Factors influencing knowledge of contraceptives identified in research works include locational endowment, personal factors such as education and age, economic factors as well as religious and cultural factors (NDHS, 2013).

Statement of the Problem

Single women in universities are at the age of active sexual life. However, the pursuit higher degrees lead to late marriages. The ideal is for them to maintain a state of abstinence until marriage, this is however not so for most single women. Some of them engage in pre-marital sexual intercourse; the consequence of which is mostly unintended pregnancies, if no form of contraception was used. Most of these unintended pregnancies eventually end in abortions (which are most often unsafe) and unplanned births. Among single women therefore exists the desire to delay pregnancies, making the provision of correct contraceptive information very crucial to them.

Through verbal interaction with some single women, the researcher discovered that it was a common thought that male condoms and over-the-counter contraceptive pills are the only modern contraceptive methods available to unmarried women. Also, verbal extraction from some clients during the researcher's practicum experience at Civil Service Hospital, Ilorin revealed that single women think that contraceptive services at health facilities are for married women only. This thought has made some single women to seek for contraceptive services in secrecy (either by paying extra charges to contraceptive service provider or as a favour from providers they are familiar with). Some of them disclosed that they had to lie about their marital status in order to access contraceptive services. These prompted the researcher to carry out the study on the knowledge of modern contraceptives among single women in Universities in Kwara State.

Research Question

The question below was raised to guide this study:

1. What is the level of single women's knowledge on modern contraceptives in universities in Kwara State?

Hypotheses

The following hypotheses were tested in this study:

1. There will be no significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on age;

2. There will be no significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on religion; and
3. There will be no significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on ethnicity.

Methodology

The research design adopted for this study was a descriptive research of the survey type. The population of the study comprised all final year undergraduate single women in universities in Kwara State totaling 7,419 single women as at 2016/2017 academic session (addition of numbers of final year female students sourced from registries of the four universities).

The Inclusion criteria: the study included all single women in final year of their undergraduate studies as at 2016/2017 academic session, attending universities in Kwara State.

A multi-stage sampling technique of stratified, purposive, proportionate, simple random and systematic sampling was employed to select 1,996 single women for this study.

A researcher-designed questionnaire was used to collect data for the study. The questionnaire was divided into two (2) sections; Section A contained the demographic data of the respondents while section B elicited information about single women's knowledge of modern contraceptives. The Fisher knowledge rating scale of 'know it well', 'have seen or heard of it' and 'have no clue' were used for statements on knowledge (Fisher, 2011).

The instrument was administered and collected on the spot with the help of four (4) trained Research Assistants (RA). A total of 1,996 copies of questionnaire were administered but 1,988 copies were retrieved (99.6% retrieval rate). The completed copies of questionnaire were collected, sorted, coded and analysed using SPSS (Statistical Package for Social Science) version 20.0. The statistical tools that were used for personal data were descriptive statistics of percentages and frequency counts. The hypotheses were tested using the t-test and ANOVA

statistical methods to compare the variables with two or more group means at 5% level of significance. In areas where significant differences were indicated, a post-hoc comparison was presented using the Duncan Multiple Range Test (DMRT).

Results

Research Question 1: What is the level of single women's knowledge on modern contraceptives in universities in Kwara State?

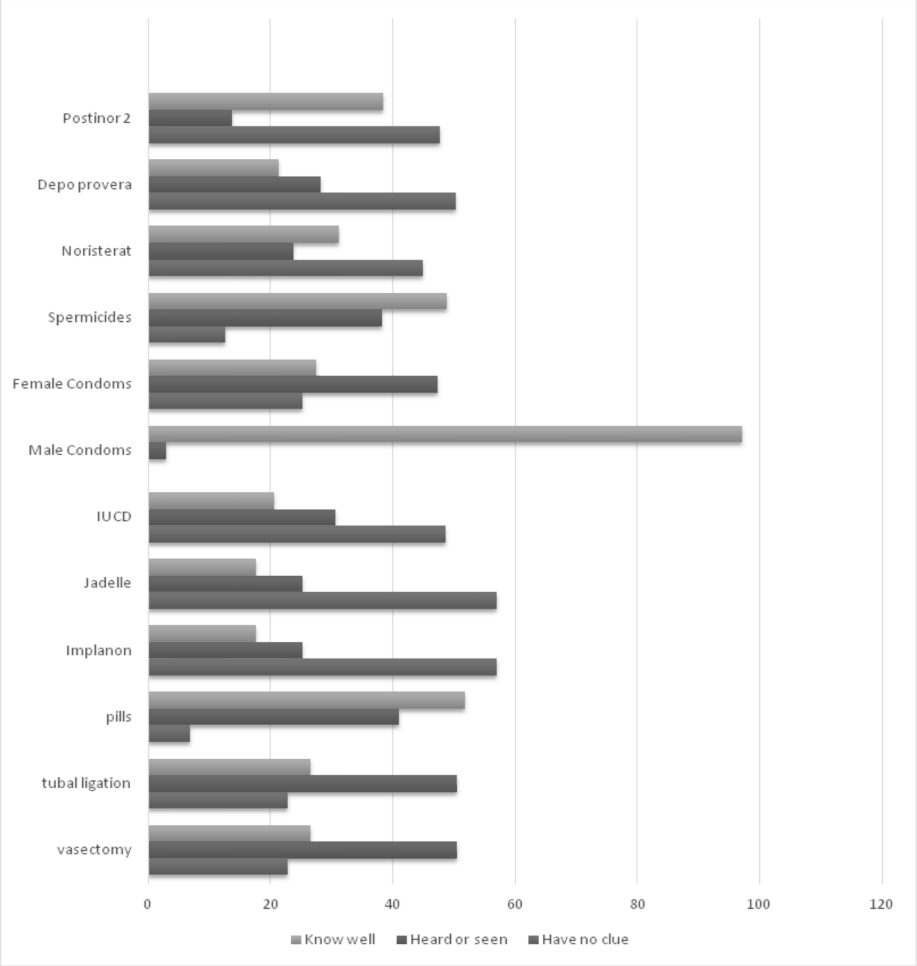

Fig. 1: *Bar Chart Showing Knowledge of Modern Contraceptives among Single Women*

Responses rate greater than 50% represents good knowledge in this study out of twelve methods listed, nine methods received responses of more than 50%, thus the respondents had good knowledge of modern contraceptive. Figure 1shows that the modern contraceptive known by all the respondents 1,988(100%) was the male condom. 93% of the respondents had knowledge of contraceptive pills, 87.3% had knowledge of Spermicides, 77.1% had knowledge of the permanent methods of contraception (that is, tubal ligation and Vasectomy), 74.8% had knowledge of Female Condom, 54.0% had knowledge of Noristerat, 52.2% had knowledge of Postinor2 (Emergency Contraceptive) while 51.4% of the respondents had knowledge of Intra Uterine Contraceptive Device (IUCD). The Modern Contraceptive methods least known to the respondents were Depo Provera 49.8% and the contraceptive implants [Jadelle: 43.0%; Implanon: 42.9%)].

Hypotheses Testing:

Hypothesis 1: There will be no significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on age.

Table 2: ANOVA Results Comparing the Knowledge of Modern Contraceptives among Single Women based on Age.

Source	SS	df	MS	Calculated F-value	Critical F-Value	Decision
Between Groups	115449.36	4	28862.34			
Within Groups	21215.95	1983	10.70	3.697	3.000	Ho Rejected
Total	136665.31	1987				

Table 2 shows that hypothesis 1 was rejected because the calculated F-value of 3.697 was greater than the critical F-value of 3.000. This implies that significant differences existed in the knowledge of modern contraceptives based on age among single women in Universities in Kwara State. In order to show where the difference existed, a post-hoc

Duncan Multiple Range Test (DMRT) was done. The results are as shown in Table 5.

Table 3: Duncan Multiple Range Test (DMRT) showing the area of difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on age.

Group	Age Group	Means (X)
A	Less than 19 years	39.00
B	20-24 years	33.57
C	25-29 years	20.63
D	30-34 years	16.44
E	35-39 years	14.53

The post hoc revealed that respondents in age group less than 19 years had the highest knowledge of modern contraceptives with the highest mean score of 39.00, while respondents in age group 35-39 years had the lowest knowledge of modern contraceptives with the lowest mean score of 14.53. Table 3 revealed that increasing age corresponded to decreasing mean score. The result shows that contraceptive knowledge decreases as respondents' age increases.

Hypothesis 2: There will be no significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on religion.

Table 4: Result of the t-test comparing differences in the Knowledge of Modern Contraceptives between Christian and Muslim Single Women.

Variable	N	X	SD	df	Cal. t-test value	Critical value	Decision
Islam	1091	32.09	5.59	1986	71.795	2.020	H_o Rejected
Christianity	897	17.93	2.10				

$P<0.05$

Table 4 shows that the Muslim and Christian mean scores were 32.09 and 17.93and the Standard deviations of 5.59 and 2.10 respectively, giving a calculated t-value of 71.795 which is greater in its absolute terms than the critical value of 2.020 at the degree of freedom of 1,986. Therefore, the null hypotheses which stated that there is no significant difference in the knowledge of modern contraceptives between Christian and Muslim single women was rejected. This implies that religion created a significant difference in the knowledge of modern contraceptives among single women as shown in Table 4. Muslim single women had higher knowledge of modern contraceptives than Christian single women in universities in Kwara State.

Hypothesis 3: There will be no significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on ethnicity

Table 5: ANOVA Results Comparing the Knowledge of modern Contraceptives among Single Women based on Ethnicity.

Source	SS	Df	MS	Calculated F-value	Critical F- Value	Decision
Between Groups	97450.19	2	48725.10			
Within Groups	39215.12	1985	19.76	3.466	3.00	Ho Rejected
Total	136665.31	1987				

P<0.05

Table 5 shows that there were significant differences in the knowledge of modern contraceptives among single women in universities in Kwara State based on ethnicity. In order to find the source of the differences observed, a Duncan Multiple Range Test (DMRT) was done. The results are as shown in Table 6.

Table 6: Duncan Multiple Range Test (DMRT) showing the area of difference in the Knowledge of Modern Contraceptives among Single Women based on Ethnicity.

Group	Ethnic Group	Means (X)
A	Hausa	38.58
B	Yoruba	27.19
C	Igbo	16.97

Table 6 shows the results of the Duncan Multiple Range Test (DMRT) on ethnicity. It was revealed that the Hausas had the highest knowledge of modern contraceptives with a mean score of 38.58, this is followed by the Yorubas with a mean score of 27.19, while the Igbo ethnic group had the lowest knowledge of modern contraceptive with a mean score of 16.97.

Discussion of Findings

Hypothesis 1 revealed that there was a significant difference in the knowledge of modern contraceptives among single women in universities in Kwara State based on age. The finding was in agreement with the study of Tolossa, Meshesha and Abajobir (2013) which was conducted among female students in Hawassa University in Ethiopia. The work of Tolossa et al. (2013) showed that students aged twenty (20) years and above were more likely to have knowledge on Emergency Contraceptive than those aged less than twenty (20) years. Also, the study of Tunau, Awosan, Adamu, Muhammad, Hassan, Nasir, Raji, Oche, Nwobodo and Baba (2016) revealed significant differences in modern contraceptive knowledge among women in Urban and Rural Communities in Sokoto based on age, however the study revealed poor knowledge among respondents. Also, the work of Anaman and Okai (2016) carried out among women in Peri-Urban area of Accra, Ghana revealed that the knowledge of modern contraceptive increased with the age of respondents. The NDHS (2013) also reported differences in modern contraceptive knowledge based on age. Modern contraceptive knowledge increased with age from age group 15-19years, 20-24years, 25-29years, 30-34years and reached a peak at the age group 35-39years.

The knowledge of modern contraceptives then began to decline from 40-45 to 46-49 years. This present study however, found that contraceptive knowledge among single women in universities in Kwara State decreases as age increases. This may be attributed to the explorative nature of the younger age groups in this era of social media which had made information closer to them. Seeing that they may have a long time before marriage due to educational pursuit, younger women may try to satisfy their curiosity.

Hypothesis 2 showed that there was significant difference in the knowledge of modern contraceptive among single women in universities in Kwara State based on religion. This results agreed with Indongo (2004) that religious teachings cause differences in contraceptive knowledge. Also, the finding corroborated the work of Katama and Hibstu (2016) which revealed that the respondents had adequate contraceptive knowledge but there was a significant difference in the knowledge of contraception among respondents on the basis of religion. It was revealed by Katama and Hibstu (2016) that Muslims had the highest knowledge of contraception. This group was followed by Protestants and then Catholics. Results of the present study also revealed high contraceptive knowledge among Muslim respondents. This may be as a result of the teachings which most times, do not support modern contraceptives. Also, the fact that Muslims had higher knowledge than their Christian counterparts may be due to the strong preaching against contraceptives among the Catholic denomination of the Christian faith.

Hypothesis 3 found that there was a significant difference in the knowledge of modern contraceptives among the respondents based on ethnicity. This finding is in agreement with the outcome of Bamaiyi, Sule and Azeez (2016) that there was a significant difference in the contraceptive knowledge among female Nigerian graduates based on ethnicity. Bamaiyi et.al (2016) found that Yoruba ethnic group displayed better knowledge of contraceptives than Hausas and Igbos. Borrero, Farkas, Dehlendorf, and Rocca (2014) revealed that there was a difference in the contraceptive knowledge among Black, Hispanic and white single men between 18-29 years. Borrero et al. (2014) showed low contraceptive knowledge among Blacks and Hispanics (the ethnonym Hispanic or Latino refers to "a person of Cuban, Mexican,

Puerto Rican, South or Central American, or other Spanish culture origin). It is in the researcher's view that ethnic groups hold different believes on the use of modern contraceptives. Ethnic groups that encourage high fertility preference may not be in support of contraceptive use. Some ethnic groups such as the Igbo ethnic group think that having many children makes one stronger and powerful. Hence, such ethnic groups may becloud contraceptive information among their members. Such ethnic groups are rather interested in knowledge of practices that boost fertility than knowledge of practices that reduce fertility rates. Hausas had the highest knowledge of modern contraceptives as revealed by this study.

Conclusion

This study concluded that single women of different age groups have different levels of knowledge of modern contraceptives among single women in universities in Kwara State; Significant difference in the knowledge of modern contraceptives was as a result of religious differences among single women in universities in Kwara State; and Ethnicity contributed to differences in the level of modern contraceptive knowledge of modern contraceptives among single women in universities in Kwara State.

Recommendations

Based on the findings of this study, the study thus recommended that:

1. Single women in universities of age group less than 19 years should be given education on modern contraceptives through media channels such as television, Internet, jingles and pamphlets.
2. Christian single women should be adequately educated on modern contraceptives through their religious leaders.
3. Campaigns to pass adequate information and messages about modern contraceptives to Yoruba and Igbo single women should be done at community levels.

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